## CLAIMS

## 1) - A compound of formula (I):

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(I)

as well as pharmaceutically acceptable salts thereof; wherein

R<sub>1</sub> is selected from the group consisting of alkyl( $C_1$ - $C_6$ ), alkenyl( $C_2$ - $C_6$ ),  $\omega$ ,  $\omega$ ,  $\omega$ -trifluoroalkyl( $C_1$ - $C_6$ ), cycloalkyl( $C_3$ - $C_6$ ), cycloalkyl( $C_3$ - $C_6$ ) alkyl( $C_1$ - $C_6$ ), -0-alkyl( $C_1$ - $C_6$ ), -NH-alkyl( $C_1$ - $C_6$ ), alkyl( $C_1$ - $C_6$ )-N(dialkyl( $C_1$ - $C_6$ ), alkyl( $C_1$ - $C_6$ )-N(dialkyl( $C_1$ - $C_6$ )), phenyl, monosubstituted phenyl, disubstituted phenyl, phenylalkyl( $C_1$ - $C_6$ ), phenylalkenyl( $C_2$ - $C_6$ ), furyl, substituted furyl, isoxazolyl, substituted isoxazolyl, pyrazolyl, substituted pyrazolyl, thienyl, substituted thienyl, thiazolyl, substituted thiazolyl, pyridyl and substituted pyridyl;

R<sub>2</sub> is selected from the group consisting of hydrogen, alkyl( $C_1$ - $C_6$ ), alkenyl( $C_2$ - $C_6$ ), alkynyl( $C_2$ - $C_6$ ) and cycloalkyl( $C_3$ - $C_6$ );

or else

 $R_1$  and  $R_2$  form a cycle having the structure:

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wherein n is an integer 1, 2 or 3;

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 $R_3$  is selected from the group consisting of hydrogen, halogen, alkyl( $C_1$ - $C_6$ ), cycloalkyl( $C_3$ - $C_6$ ), alkenyl( $C_2$ - $C_6$ ), alkynyl( $C_2$ - $C_6$ ), -O-alkyl( $C_1$ - $C_6$ ), halo-alkyl( $C_1$ - $C_6$ ), -CN, -SO<sub>2</sub>- $R_4$ , -NH- $R_4$ , -NR<sub>4</sub> $R_5$ , -COR<sub>6</sub>, -CO-NHR<sub>6</sub>, -COOR<sub>6</sub>, -C(NR<sub>7</sub>)R<sub>6</sub>, phenyl, substituted phenyl, heteroaryl and substituted heteroaryl;

 $R_4$  and  $R_5$  are independently selected from the group consisting of alkyl( $C_1$ - $C_6$ ); cycloalkyl( $C_3$ - $C_6$ ), aryl and heteroaryl;

- R<sub>6</sub> is selected from the group consisting of hydrogen, alkyl( $C_1$ - $C_6$ ), alkenyl( $C_2$ - $C_6$ ), alkynyl( $C_2$ - $C_6$ ), cycloalkyl( $C_3$ - $C_6$ ), phenyl, substituted phenyl, furyl, substituted furyl, thienyl, substituted thienyl, thiazolyl, substituted thiazolyl, pyridyl and substituted pyridyl;
- 15 R<sub>7</sub> is selected from the group consisting of alkyl( $C_1$ - $C_6$ ), cycloalkyl( $C_3$ - $C_6$ ), -OH, -O-alkyl( $C_1$ - $C_6$ ), alkyl( $C_1$ - $C_6$ )-O-alkyl( $C_1$ - $C_6$ ), alkyl( $C_1$ - $C_6$ )-NH-alkyl( $C_1$ - $C_6$ ), alkyl( $C_1$ - $C_6$ )-N(dialkyl( $C_1$ - $C_6$ )), phenyl, monosubstituted phenyl, furyl, thienyl, thiazolyl and pyridyl; and
- R<sub>8</sub> is selected from the group consisting of hydrogen, alkyl( $C_1$ - $C_6$ ), cycloalkyl( $C_3$ - $C_6$ ), aryl and substituted or unsubstituted heteroaryl;

with the proviso that simultaneously:

 $R_1$  may not be p-tolyl and  $R_2$  methyl and  $R_3$  benzoyl; and  $R_1$  may not be p-tolyl and  $R_2$  ethyl and  $R_3$  furyl-2-carbonyl.

- 2) A compound according to claim 1, wherein  $R_1$  and  $R_2$  are independently as defined in formula (I) and  $R_3$  is a cyano group.
- 3) A compound according to claim 2, wherein  $R_1$  is selected from the group consisting of methyl, ethyl, n-propyl, i-propyl, n-butyl, phenyl and 4-methoxyphenyl; and

propynyl.

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R<sub>2</sub> is selected from the group consisting of methyl, ethyl, n-propyl, i-propyl, n-butyl, cyclopropyl and 2-propynyl.

- 4) A compound according to claim 2, wherein  $R_1$  and  $R_2$  jointly form a 1,3-propylene group.
- 5) A compound according to claim 1, wherein  $R_1$  and  $R_2$  are independently as defined in formula (I) and  $R_3$  is a thiophene-2-carbonyl group.

10 6) - A compound according to claim 5, wherein  $R_1$  is selected from the group consisting of methyl, ethyl, ni-propyl, n-butyl, propyl, 2-phenylethenyl, trifluroethyl, phenyl, 2-chlorophenyl, 3-chlorophenyl, 4-15 chlorophenyl, 2,4-dichlorophenyl, 3,4-dichlorophenyl, cyanophenyl, 3-cyanophenyl, 4-cyanophenyl, 4-methoxyphenyl, 3-nitrophenyl, 4-nitrophenyl, 2-thienyl, 5-methyl-4isoxazolyl, 5-methyl-2-trifluoromethyl-3-furyl, morpholinyl)-3-pyridyl, 2,4-dimethyl-5-thiazolyl, 20 cyclopropyl, benzyl, vinyl, 3,5-dimethyl-4-isoxazolyl, 1,3,5-trimethyl-4-pyrazolyl and cyclopentylmethyl; and R2

7) - A compound according to claim 5 wherein  $R_1$  and  $R_2$  jointly form a 1,3-propylene group.

is selected from the group consisting of hydrogen, methyl, ethyl, n-propyl, i-propyl, n-butyl, cyclopropyl and 2-

8) - A compound according to claim 1, wherein  $R_1$  and  $R_2$  are independently as defined in formula (I) and  $R_3$  is a benzoyl group.

9) - A compound according to claim 8 wherein  $R_1$  is selected from the group consisting of methyl and ethyl; and  $R_2$  is selected from the group consisting of methyl, ethyl and 2-propinyl.

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10) - A compound according to claim 1, wherein  $R_1$  and  $R_2$  are independently as defined in formula (I) and  $R_3$  is a 4-fluorobenzoyl group.

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11) - A compound according to claim 10 wherein  $R_1$  is selected from the group consisting of methyl and ethyl; and  $R_2$  is selected from the group consisting of methyl, ethyl and 2-propinyl.

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12) - A compound according to claim 1, wherein  $R_1$  and  $R_2$  are independently as defined in formula (I) and  $R_3$  is a 4-methylbenzoyl group.

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13) - A compound according to claim 12 wherein  $R_1$  is selected from the group consisting of methyl and ethyl; and  $R_2$  is selected from the group consisting of methyl, ethyl and 2-propinyl.

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14) - A compound according to claim 1, wherein  $R_1$  and  $R_2$  are independently as defined in formula (I) and  $R_3$  is a 4-methoxybenzoyl group.

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15) - A compound according to claim 14 wherein  $R_1$  is selected from the group consisting of methyl and ethyl; and  $R_2$  is selected from the group consisting of methyl, ethyl and 2-propinyl.

- 16) A compound according to claim 1, wherein  $R_1$  and  $R_2$  are independently as defined in formula (I) and  $R_3$  is a 5-methyl-1,2,4,-oxadiazol-3-yl group.
- 5 17) A compound according to claim 16 wherein  $R_1$  is methyl and  $R_2$  is selected from the group consisting of hydrogen and ethyl.
- 18) A compound according to claim 1, wherein  $R_1$  and  $R_2$  are independently as defined in formula (I) and  $R_3$  is a pyridyl-2-carbonyl group.
- 19) A compound according to claim 18 wherein  $R_1$  is selected from the group consisting of methyl and ethyl; and  $R_2$  is selected from the group consisting of methyl, ethyl and 2-propinyl.
  - 20) A compound according to claim 1, wherein  $R_1$  and  $R_2$  are independently as defined in formula (I) and  $R_3$  is a pyridyl-4-carbonyl group.
    - 21) A compound according to claim 20 wherein  $R_1$  is selected from the group consisting of methyl and ethyl; and  $R_2$  is selected from the group consisting of methyl, ethyl and 2-propinyl.
- 22) A compound according to claims 2 and 3, wherein said compound is selected from the group consisting of:

  N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]-N
  methyl-methanesulfonamide;

  N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]-N
  ethyl-methanesulfonamide;

- N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]-N-methyl-benzenesulfonamide;
- N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]-N-ethyl-benzenesulfonamide;
- N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]-N-prop-2-inyl-methanesulfonamide;
  - N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]-N-propylethanesulfonamida;
    - N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]-N-ethyl-ethanesulfonamide;
- N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]-N-prop-2-inyl-propane-2-sulfonamide;
  - N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]-N-methyl-ethanesulfonamide;
- N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]-N-butyl-ethanesulfonamide;
  - N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]-N-methyl-2-propanesulfonamide;
  - $\label{eq:n-special} $$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]-N-ethyl-2-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]=$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]-$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]-$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]-$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]-$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]-$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]-$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]-$$N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl]-$$N-[3-(3-cyano-pyrazolo[$
- 20 propanesulfonamide;
  - N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]-N-butyl-2-propanesulfonamide;
  - N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]-N-propyl-2-propanesulfonamide; and
- N-[3-(3-cyano-pyrazolo[1,5-a]pyrimidin-7-yl)-phenyl]-N-prop-2-inyl-ethanesulfonamide.
- 23) A compound according to claim 4 wherein said compound is 7-(3-(2-isothiazolydinyl-1,1-dioxide)-phenyl) 30 3-cyano-pyrazolo[1,5-a]pyrimidine.
  - 24) A compound according to claims 5 and 6, wherein said compound is selected from the group consisting of:

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N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
       pyrimidin-7-yl]-phenyl}-methanesulfonamide;
       N-ethyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
       pyrimidin-7-yl]-phenyl}-methanesulfonamide;
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       N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
       pyrimidin-7-yl]-phenyl}-benzenesulfonamide;
       N-ethyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
       pyrimidin-7-yl]-phenyl}-benzenesulfonamide;
       N-prop-2-inyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-
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       a]pyrimidin-7-yl]-phenyl}-methanesulfonamide;
       N-propyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
       pyrimidin-7-yl]-phenyl}-ethanesulfonamide;
       N-ethyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
       pyrimidin-7-yl]-phenyl}-ethanesulfonamide;
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       N-prop-2-inyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-
        a]pyrimidin-7-yl]-phenyl}-2-propanesulfonamide;
       N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
        pyrimidin-7-yl]-phenyl}-ethanesulfonamide;
        N-butyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
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        pyrimidin-7-yl]-phenyl}-ethanesulfonamide;
        N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-
        a]pyrimidin-7-yl]-phenyl}-2-propanesulfonamide;
        N-ethyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
        pyrimidin-7-yl]-phenyl}-2-propanesulfonamide;
25
        N-propyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
        pyrimidin-7-yl]-phenyl}-2-propanesulfonamide;
        N-butyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
        pyrimidin-7-yl]-phenyl}-2-propanesulfonamide;
        N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
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        pyrimidin-7-yl]-phenyl}-2-phenylethenesulfonamide;
        N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
        pyrimidin-7-yl]-phenyl}-2,2,2-trifluoroethanesulfonamide;
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N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
       pyrimidin-7-yl]-phenyl}-2-chlorobenzenesulfonamide;
       N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
       pyrimidin-7-yl]-phenyl}-3-chlorobenzenesulfonamide;
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       N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
       pyrimidin-7-yl]-phenyl}-4-chlorobenzenesulfonamide;
       N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
       pyrimidin-7-yl]-phenyl}-2,4-dichlorobenzenesulfonamide;
       N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
10
       pyrimidin-7-yl]-phenyl}-3,4-dichlorobenzenesulfonamide;
       N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
       pyrimidin-7-yl]-phenyl}-2-cyano-benzenesulfonamide;
       N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
       pyrimidin-7-yl]-phenyl}-3-cyano-benzenesulfonamide;
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       N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
       pyrimidin-7-yl]-phenyl}-4-cyano-benzenesulfonamide;
       N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
       pyrimidin-7-yl]-phenyl}-3-nitro-benzenesulfonamide;
       N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
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       pyrimidin-7-yl]-phenyl}-4-nitro-benzenesulfonamide;
       N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-
       a]pyrimidin-7-yl]-phenyl}-2-thiophenesulfonamide;
       N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
       pyrimidin-7-yl]-phenyl}-5-methyl-4-isoxazolyl-sulfonamide;
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       N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
       pyrimidin-7-yl]-phenyl}-2-trifluoromethyl-5-methyl-3-furyl-
        sulfonamide;
        N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
        pyrimidin-7-yl]-phenyl}-6-(morpholin-4-yl)-3-pyridyl-
30
        sulfonamide;
        N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
        pyrimidin-7-yl]-phenyl}-2,4-dimethyl-5-thiazolyl-
        sulfonamide;
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N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
pyrimidin-7-yl]-phenyl}-cyclopropylsulfonamide;
N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
pyrimidin-7-yl]-phenyl}-benzylsulfonamide;
N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
pyrimidin-7-yl]-phenyl}-vinylsulfonamide;
N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
pyrimidin-7-yl]-phenyl}-3,5-dimethyl-4-isoxazolyl-
sulfonamide;
N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a]
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N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a] pyrimidin-7-yl]-phenyl}-1,3,5-trimethyl-4-pyrazolyl-sulfonamide;

N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a] pyrimidin-7-yl]-phenyl}-propanesulfonamide;

- N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a] pyrimidin-7-yl]-phenyl}-butanesulfonamide; and N-methyl-N-{3-[3-(thiophene-2-carbonyl)-pyrazolo[1,5-a] pyrimidin-7-yl]-phenyl}-cyclopenthylmethanesulfonamide.
- 25) A compound according to claim 7 wherein said compound is 7-(3-(2-isothiazolydinyl-1,1-dioxide)-phenyl)-3-(thiophene-2-carbonel)-pyrazolo[1,5-a]pyrimidine.
- 26) A compound according to claims 8 and 9 wherein said compound is selected from the group consisting of:

  N-methyl-N-{3-[3-(benzoyl)-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl}-methanesulfonamide;

  N-ethyl-N-{3-[3-(benzoyl)-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl}-methanesulfonamide;

  N-methyl-N-{3-[3-(benzoyl)-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl}-ethanesulfonamide;

  N-ethyl-N-{3-[3-(benzoyl)-pyrazolo[1,5-a]pyrimidin-7-yl]-

phenyl}-ethanesulfonamide;

N-prop-2-inyl-N-{3-[3-(benzoyl)-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl}-ethanesulfonamide; and
N-prop-2-inyl-N-{3-[3-(benzoyl)-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl}-methanesulfonamide.

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- 27) A compound according to claims 10 and 11 wherein said compound is selected from the group consisting of:

  N-methyl-N-{3-[3-(fluorobenzene-4-carbonyl)-pyrazolo[1,5-a] ...

  pyrimidin-7-yl]-phenyl}-methanesulfonamide;

  N-ethyl-N-{3-[3-(fluorobenzene-4-carbonyl)-pyrazolo[1,5-a]
- N-ethyl-N-{3-[3-(fluorobenzene-4-carbonyl)-pyrazolo[1,5-a]

  pyrimidin-7-yl]-phenyl}-methanesulfonamide;

  N-methyl-N-{3-[3-(fluorobenzene-4-carbonyl)-pyrazolo[1,5-a]

  pyrimidin-7-yl]-phenyl}-ethanesulfonamide;

  N-ethyl-N-{3-[3-(fluorobenzene-4-carbonyl)-pyrazolo[1,5-a]
- pyrimidin-7-yl]-phenyl}-ethanesulfonamide;
  N-prop-2-inyl-N-{3-[3-(fluorobenzene-4-carbonyl)-pyrazolo
  [1,5-a]pyrimidin-7-yl]-phenyl}-ethanesulfonamide; and
  N-prop-2-inyl-N-{3-[3-(fluorobenzene-4-carbonyl)pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl}-methanesulfonamide.

- 28) A compound according to claims 12 and 13 wherein said compound is selected from the group consisting of:

  N-methyl-N-{3-[3-(4-methylbenzoyl)-pyrazolo[1,5-a]

  pyrimidin-7-yl]-phenyl}-methanesulfonamide;

  N-ethyl-N-{3-[3-(4-methylbenzoyl)-pyrazolo[1,5-a]pyrimidin-7-yl]-phenyl}-methanesulfonamide;

  N-methyl-N-{3-[3-(4-methylbenzoyl)-pyrazolo[1,5-a]

  pyrimidin-7-yl]-phenyl}-ethanesulfonamide;

  N-ethyl-N-{3-[3-(4-methylbenzoyl)-pyrazolo[1,5-a]pyrimidin-
- N-ethyl-N-{3-[3-(4-methylbenzoyl)-pyrazolo[1,5-a]pyrimidi 7-yl]-phenyl}-ethanesulfonamide; N-prop-2-inyl-N-{3-[3-(4-methylbenzoyl)-pyrazolo[1,5-a] pyrimidin-7-yl]-phenyl}-ethanesulfonamide; and

 $N-prop-2-inyl-N-{3-[3-(4-methylbenzoyl)-pyrazolo[1,5-a]}$  pyrimidin-7-yl]-phenyl}-methanesulfonamide.

- 29) A compound according to claims 14 and 15 wherein 5 said compound is selected from the group consisting of:  $N-methyl-N-{3-[3-(4-methoxybenzoyl)-pyrazolo[1,5-a]}$ pyrimidin-7-yl]-phenyl}-methanesulfonamide; N-ethyl-N-{3-[3-(4-methoxybenzoyl)-pyrazolo[1,5-a] pyrimidin-7-yl]-phenyl}-methanesulfonamide; 10  $N-methyl-N-{3-[3-(4-methoxybenzoyl)-pyrazolo[1,5-a]}$ pyrimidin-7-yl]-phenyl}-ethanesulfonamide; N-ethyl-N-{3-[3-(4-methoxybenzoyl)-pyrazolo[1,5-a] pyrimidin-7-yl]-phenyl}-ethanesulfonamide; N-prop-2-inyl-N-{3-[3-(4-methoxybenzoyl)-pyrazolo[1,5-a] 15 pyrimidin-7-yl]-phenyl}-ethanesulfonamide; and  $N-prop-2-inyl-N-{3-[3-(4-methoxybenzoyl)-pyrazolo[1,5-a]}$ pyrimidin-7-yl]-phenyl}-methanesulfonamide.
- 30) A compound according to claims 16 and 17 wherein said compound is selected from the group consisting of:

  N-{3-[3-(5-methyl-[1,2,4]oxadiazol-3-yl)-pyrazolo[1,5-a]

  pyrimidin-7-yl]-phenyl}-methanesulfonamide; and

  N-ethyl-N-{3-[3-(5-methyl-[1,2,4]oxadiazol-3-yl)-pyrazolo

  [1,5-a]pyrimidin-7-yl]-phenyl}-methanesulfonamide.
- 31) A compound according to claims 18 and 19 wherein said compound is selected from the group consisting of:

  N-methyl-N-{3-[3-(pyridin-2-carbonyl)-pyrazolo[1,5-a]

  pyrimidin-7-yl]-phenyl}-methanesulfonamide;

  N-ethyl-N-{3-[3-(pyridin-2-carbonyl)-pyrazolo[1,5-a]

  pyrimidin-7-yl]-phenyl}-methanesulfonamide;

  N-prop-2-inyl-N-{3-[3-(pyridin-2-carbonyl)-pyrazolo[1,5-a]

  pyrimidin-7-yl]-phenyl}-methanesulfonamide;

N-methyl-N-{3-[3-(pyridin-2-carbonyl)-pyrazolo[1,5-a] pyrimidin-7-yl]-phenyl}-ethanesulfonamide; N-ethyl-N-{3-[3-(pyridin-2-carbonyl)-pyrazolo[1,5-a] pyrimidin-7-yl]-phenyl}-ethanesulfonamide; and N-prop-2-inyl-N-{3-[3-(pyridin-2-carbonyl)-pyrazolo[1,5-a] pyrimidin-7-yl]-phenyl}-ethanesulfonamide.

- 32) A compound according to claims 20 and 21 wherein said compound is selected from the group consisting of: 10 N-methyl-N-{3-[3-(pyridin-4-carbonyl)-pyrazolo[1,5-a] pyrimidin-7-yl]-phenyl}-methanesulfonamide; N-ethyl-N-{3-[3-(pyridin-4-carbonyl)-pyrazolo[1,5-a] pyrimidin-7-yl]-phenyl}-methanesulfonamide; N-methyl-N-{3-[3-(pyridin-4-carbonyl)-pyrazolo[1,5-a] 15 pyrimidin-7-yl]-phenyl}-ethanesulfonamide; N-ethyl-N-{3-[3-(pyridin-4-carbonyl)-pyrazolo[1,5-a] pyrimidin-7-yl]-phenyl}-ethanesulfonamide; N-prop-2-inyl-N-{3-[3-(pyridin-4-carbonyl)-pyrazolo[1,5-a] pyrimidin-7-yl]-phenyl}-ethanesulfonamide; and 20 N-prop-2-inyl-N-{3-[3-(pyridin-4-carbonyl)-pyrazolo[1,5-a] pyrimidin-7-yl]-phenyl}-methanesulfonamide.
- 33) A process for preparing a compound of formula
   (I) or a pharmaceutically acceptable salt thereof,
   according to claim 1, comprising reacting intermediate
   (II):

wherein  $R_1$  and  $R_2$  are as defined in (I) and Q is an appropriate leaving group selected from the group consisting of  $N(dialkyl(C_1-C_6))$ , alkylthio( $C_1-C_6$ ) and alkoxy( $C_1-C_6$ ), with intermediate (III):

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(III)

- wherein  $R_3$  is as defined in (I) and alternatively, treatment of the compounds of claim 1, in the form of free base, with an acid to form a salt thereof.
- 34) A process according to claim 33, comprising utilizing the intermediate of formula (II) where Q is selected from the group consisting of dimethylamino, methylthio and methoxy.
- 35)- A method for treating or preventing diseases associated with GABAA receptor modulation in a mammal which comprises administering to said mammal an effective amount of a compound of claim 1.
- 36) A method for treating or preventing diseases associated with  $\alpha_1\text{-}\mathsf{GABA_A}$  receptor modulation in a mammal which comprises administering to said mammal an effective amount of a compound of claim 1.
- 37)- A method for treating or preventing diseases 30 associated with  $\alpha_2\text{-GABA}_A$  receptor modulation in a mammal

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which comprises administering to said mammal an effective amount of a compound of claim 1.

- 38) A method for treating or preventing anxiety in a mammal which comprises administering to said mammal an effective amount of a compound of claim 1.
  - a mammal which comprises administering to said mammal an effective amount of a compound of claim 1.
    - 40) A method for treating or preventing sleep disorders in a mammal which comprises administering to said mammal an effective amount of a compound of claim 1.

41) - A method for treating or preventing insomnia in a mammal which comprises administering to said mammal an

effective amount of a compound of claim 1.

- 42) A method for inducing sedation-hypnosis in a mammal which comprises administering to said mammal an effective amount of a compound of claim 1.
- 43) A method for inducing anesthesia in a mammal which comprises administering to said mammal an effective amount of a compound of claim 1.
- 44) A method for modulating the necessary time to induce sleep and its duration in a mammal which comprises administering to said mammal an effective amount of a compound of claim 1.

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- 45) A method for inducing muscle relaxation in a mammal which comprises administering to said mammal an effective amount of a compound of claim 1.
- 5 46) A composition comprising a compound of claim 1 in association with a therapeutically inert carrier.
- 47) The use of a compound of claim 1 for preparing a medicament for treating or preventing diseases associated with GABAA receptor modulation.
  - 48) The use of claim 47 wherein the diseases are associated with  $\alpha_1\text{-}GABA_A$  or  $\alpha_2\text{-}GABA_A$  receptor modulation.
- 15 49) The use of a compound of claim 1 for preparing a medicament for treating or preventing anxiety, epilepsy, sleep disorders, insomnia, for inducing sedation-hypnosis, anesthesia or muscle relaxation or for modulating the necessary time to include sleep and its duration.
  - 50) A process for preparing the intermediate of formula (VII):

wherein  $R_1$  is as described in (I), characterized by the reaction of the intermediate of formula (IV):

wherein  $R_1$  is as described above, with N,N-dimethylformamide dimethyl acetal.

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51) - A process for preparing the intermediate of formula (VII):

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wherein  $R_1$  is as described in (I), characterized by the reaction of N-(3-acetylphenyl)-2,2,2-trifluoroacetamide (VIII):

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and N,N-dimethylformamide dimethyl acetal, followed by the formation of sulfonamide by reaction with the corresponding sulfonic acid chloride.